ImageMagick

Image converter and editor

CONCEPTS

Order matters: settings (-background, -gravity, -quality) must come before the operator that uses them, and options apply to the images read so far.

Read input files
↓ settings
Settings -background, -gravity
↓ operators
Operators -resize, -crop…
↓ sequence
Image list ( ) stacks, -append
↓ encode
Write output name sets format

ImageMagick 7 has one entry point, magick. IM6 used convert, mogrify, identify and montage directly; in IM7 those are subcommands (magick mogrify). Plain convert still works as a legacy alias but is deprecated.

Quote geometry with < > ^ ! and filenames with [ ] so the shell leaves them alone. On Linux, escape stack parentheses as \(and \).

CONVERT & INSPECT

`magick <in> <out>`
Convert; format follows the extension

`magick identify <file>`
One-line size, format, depth

`magick identify -format "%wx%h\n" <files>`
Print just the dimensions

`magick '<in>[0]' <out>`
Read only the first frame or page

RESIZE & CROP

`-resize <WxH>`
Fit inside the box, keep aspect

`-resize <W>x`
Set width, height follows

`-resize <N>%`
Scale by percentage

`-resize 800x600>`
Shrink only if larger

RESIZE & CROP (cont.)

`-resize 800x600^`
Fill the box (minimum size)

`-thumbnail <WxH>`
Resize and drop metadata, fast

`-crop <WxH>+<x>+<y>`
Cut out a region

`-gravity center -crop <WxH>+0+0`
Crop around a gravity point

ROTATE & ORIENT

`-rotate <deg>`
Rotate clockwise, fills with background

`-auto-orient`
Apply the EXIF orientation

QUALITY & COLOUR

`-quality <N>`
JPEG/WebP quality 1-100 (PNG: compression)

`-strip`
Remove EXIF, profiles and comments

TRANSPARENCY & COMPOSE

`magick <base> <over> -composite <out>`
Overlay one image on another

TEXT & DRAWING

`-gravity South -annotate +0+10 "<text>"`
Draw text at an anchor

BATCH & MONTAGE

`magick mogrify -resize <WxH> <files>`
Edit files in place (overwrites)

`magick mogrify -format jpg *.png`
Convert to new files, keep originals

`magick mogrify -path <dir> -resize <WxH> <files>`
Write results to another folder

`magick montage <files> -geometry +4+4 <out>`
Tile images into a contact sheet